



# AUTOMATED HIGH PRESSURE BALL VALVE



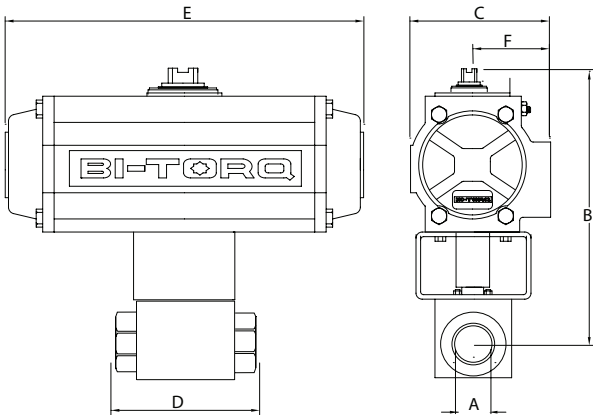
- Full Port High Pressure Ball Valves  
1/4" through 4"
- Carbon steel body rated to 6000 PSI
- Option SS and aluminum bodies
- Block body to 1"; round body to 4"
- Electric and Pneumatic Actuators
- NPT, SAE, and SAE Split Flange ends
- Standard Delrin seats and BUNA-N seals



## PNEUMATIC ACTUATORS

NOTE 1: ALL ACTUATED ASSEMBLIES REQUIRE MOUNTING KIT (INCLUDED IN DIMENSIONS)

NOTE 2: ACTUATORS SIZED FOR MAXIMUM 6000 PSI VALVE PRESSURE RATING; PLEASE CONTACT FACTORY FOR OTHER COMBINATIONS



ALL STANDARD PNEUMATIC ACTUATORS SIZED FOR 80 PSI SUPPLY; PLEASE CONSULT OUR SALES STAFF FOR OTHER COMBINATIONS

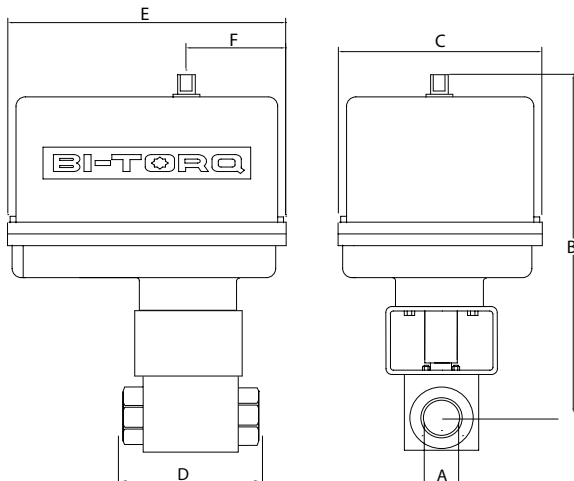
DOUBLE ACTING

|      | 1/4" | 3/8" | 1/2" | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    |
|------|------|------|------|-------|-------|--------|--------|-------|--------|-------|-------|
| A    | 7.09 | 7.21 | 7.99 | 9.06  | 9.82  | 11.00  | 12.14  | 12.80 | 16.58  | 18.61 | 22.52 |
| B    | 3.17 | 3.17 | 3.72 | 4.17  | 4.85  | 5.39   | 5.39   | 5.39  | 5.83   | 6.45  | 7.36  |
| C    | 2.74 | 2.87 | 3.36 | 3.81  | 4.51  | 5.24   | 5.33   | 6.54  | 7.50   | 9.29  | 11.21 |
| D    | 6.38 | 6.38 | 8.15 | 9.35  | 10.69 | 12.91  | 12.91  | 12.91 | 14.41  | 16.85 | 20.55 |
| E    | 1.77 | 1.77 | 2.07 | 2.30  | 2.68  | 2.87   | 2.87   | 2.87  | 3.15   | 3.44  | 3.94  |
| ACT. | 63DA | 63DA | 75DA | 85DA  | 100DA | 115DA  | 115DA  | 115DA | 125DA  | 140DA | 160DA |
| WT.  | 6.34 | 6.68 | 8.31 | 12.63 | 18.52 | 25.55  | 25.79  | 38.33 | C/F    | C/F   | C/F   |

SPRING RETURN

|      | 1/4"  | 3/8"  | 1/2"  | 3/4"  | 1"    | 1-1/4" | 1-1/2" | 2"    | 2-1/2" | 3"    | 4"    |
|------|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|-------|
| A    | 7.74  | 8.31  | 8.95  | 10.75 | 11.47 | 12.36  | 13.97  | 14.63 | 17.94  | 21.71 | 24.21 |
| B    | 3.72  | 4.17  | 4.85  | 5.39  | 5.83  | 6.45   | 7.36   | 7.36  | 7.36   | 8.58  | 8.58  |
| C    | 2.74  | 2.87  | 3.36  | 3.81  | 4.51  | 5.24   | 5.33   | 6.54  | 7.50   | 9.29  | 11.21 |
| D    | 8.15  | 9.35  | 10.69 | 12.91 | 14.41 | 16.85  | 20.55  | 20.55 | 20.55  | 22.64 | 22.64 |
| E    | 2.07  | 2.30  | 2.68  | 2.87  | 3.15  | 3.44   | 3.94   | 3.94  | 3.94   | 4.29  | 4.29  |
| ACT. | 75SR  | 85SR  | 100SR | 115SR | 125SR | 140SR  | 160SR  | 160SR | 160SR  | 200SR | 200SR |
| WT.  | 10.02 | 11.79 | 18.20 | 30.16 | 34.26 | 53.08  | 78.46  | 86.62 | C/F    | C/F   | C/F   |

## ELECTRIC ACTUATORS



|      | 1/4"  | 3/8"  | 1/2"   | 3/4"   | 1"     | 1-1/4" | 1-1/2" | 2"     | 2-1/2" | 3"     | 4"     |
|------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| A    | 9.01  | 9.13  | 11.38* | 12.00* | 12.25* | 12.85* | 17.02* | 18.68* | 20.99* | 22.75* | 25.32* |
| B    | 4.25  | 4.25  | 7.00   | 7.00   | 7.00   | 7.00   | 10.00  | 10.00  | 10.00  | 10.00  | 10.00  |
| C    | 2.74  | 2.87  | 3.36   | 3.81   | 4.51   | 5.24   | 5.33   | 6.54   | 7.50   | 9.29   | 11.21  |
| D    | 5.625 | 5.625 | 7.00   | 7.00   | 7.00   | 7.00   | 10.00  | 10.00  | 10.00  | 10.00  | 10.00  |
| E    | 2.43  | 2.43  | 2.38   | 2.38   | 2.38   | 2.38   | 3.75   | 3.75   | 3.75   | 3.75   | 3.75   |
| F    | 2.43  | 2.43  | 2.38   | 2.38   | 2.38   | 2.38   | 3.75   | 3.75   | 3.75   | 3.75   | 3.75   |
| ACT. | 200E  | 300E  | 400E   | 675E   | 1000E  | 1500E  | 2000E  | 2000E  | 3800E  | 3800E  | 3800E  |
| WT.  | 10.08 | 10.42 | 16.80  | 19.24  | 20.50  | 21.80  | 46.04  | 53.58  | C/F    | C/F    | C/F    |

\*INCLUDES DECLUTCHABLE MANUAL OVERRIDE

ALL ELECTRIC ACTUATOR DIMENSIONS ARE FOR NEMA 4 ENCLOSURES. FOR NEMA 7 ENCLOSURE DIMENSIONS, PLEASE CONSULT OUR SALES STAFF.

# AUTOMATED HIGH PRESSURE BALL VALVE

## BILL OF MATERIALS

| PART # | NAME                  | MATERIAL     | OPTIONAL MATERIAL | QTY |
|--------|-----------------------|--------------|-------------------|-----|
| 1      | BODY                  | CARBON STEEL | CARBON STEEL      | 1   |
| 2      | BALL                  | CARBON STEEL | STAINLESS STEEL   | 1   |
| 3      | SPINDLE               | CARBON STEEL | STAINLESS STEEL   | 1   |
| 4      | BALL SEAT             | DELTRIN      | C/F               | 2   |
| 5      | END CONNECTIONS       | CARBON STEEL | STAINLESS STEEL   | 2   |
| 6      | O-RING                | BUNA-N       | C/F               | 2   |
| 7      | THRUST WASHER         | DELTRIN      | C/F               | 1   |
| 8      | SPINDLE O-RING        | BUNA-N       | C/F               | 1   |
| 9      | EXTERNAL GLIDE WASHER | DELTRIN      | C/F               | 1   |
| 10     | STOP PIN              | CARBON STEEL | STAINLESS STEEL   | 1   |
| 11     | STOP WASHER           | CARBON STEEL | STAINLESS STEEL   | 1   |
| 12     | COLOR CODED TOP CAP   | ALUMINUM     | N/A               | 1   |
| 13     | TOP CAP SCREW         | CARBON STEEL | STAINLESS STEEL   | 1   |
| 14     | HANDLE                | ALUMINUM     | N/A               | 1   |

## VALVE FEATURES

- Full port carbon or stainless steel ball valve 1/4" through 4"
- NPT, SAE or split flange
- Delrin seats/BUNA seals
- 6000 PSI pressure rated
- drilled and tapped mounting pad

**PRESSURE RATING**  
6000 PSI (carbon steel)  
6000 PSI 1/4" through 3/4" in SS; 3000 PSI 1" through 4"

**TEMPERATURE RATING**  
+400° F Maximum CWP  
-60° F Minimum

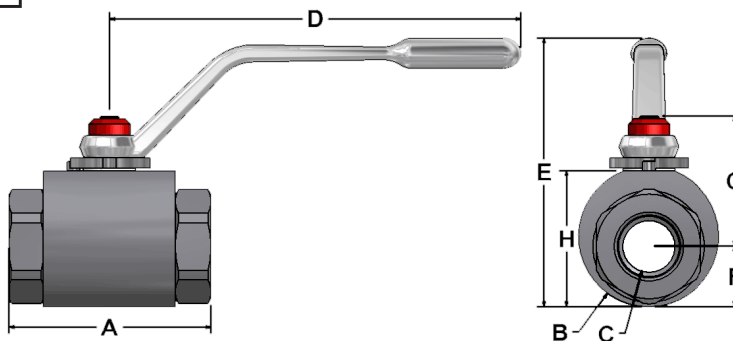
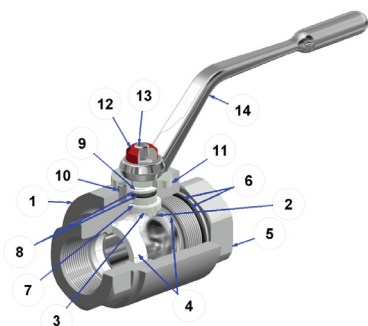
*NOTE: Maximum temperature rating for standard actuators is 150° F (electric) and 180° (pneumatic). Special seals or heat extensions are available for high temperature service.*

*For more information on BI-TORQ® actuators, please refer to brochures PN-2007 and EL-2008, or www.bitorq.com*

## ACTUATOR FEATURES

- PNEUMATIC ACTUATORS**
- Rack and pinion design
  - Spring return or double acting
  - open and closed adjustment stops
  - true NAMUR accessory mounting
  - visual indicator

- ELECTRIC ACTUATORS**
- 120VAC, 220VAC, 24VAC, 12VDC, 24VDC
  - NEMA 4 and NEMA 7 enclosures
  - Manual override
  - visual indicator



## DIMENSIONAL DATA (WITH NPT ENDS)

| SIZE   | A     | B    | C    | D     | E     | F    | G     | H    | PSI* | WEIGHT (LBS.) |
|--------|-------|------|------|-------|-------|------|-------|------|------|---------------|
| 1/4"   | 2.74  | 1.38 | 0.31 | 4.50  | 2.99  | 0.61 | 1.38  | 1.38 | 6000 | 1.08          |
| 3/8"   | 2.87  | 1.50 | 0.38 | 4.50  | 3.12  | 0.64 | 1.50  | 1.50 | 6000 | 1.42          |
| 1/2"   | 3.36  | 1.63 | 0.50 | 4.50  | 3.25  | 0.73 | 1.63  | 1.63 | 6000 | 1.80          |
| 3/4"   | 3.81  | 2.25 | 0.75 | 7.00  | 4.73  | 1.00 | 2.25  | 2.25 | 6000 | 4.24          |
| 1"     | 4.51  | 2.50 | 0.94 | 7.00  | 4.98  | 1.14 | 2.50  | 2.50 | 6000 | 5.50          |
| 1-1/4" | 4.84  | 3.38 | 1.25 | 9.85  | 6.45  | 1.45 | 3.26  | 3.38 | 6000 | 5.80          |
| 1-1/2" | 5.33  | 3.75 | 1.50 | 9.85  | 6.82  | 1.64 | 3.64  | 3.75 | 6000 | 6.04          |
| 2"     | 6.54  | 4.50 | 1.88 | 9.85  | 7.49  | 2.01 | 4.30  | 4.50 | 6000 | 18.58         |
| 2-1/2" | 7.50  | 6.94 | 2.50 | 14.50 | 10.24 | 3.29 | 6.61  | 6.94 | 6000 | C/F           |
| 3"     | 9.29  | 7.50 | 3.00 | 14.50 | 12.64 | 4.35 | 8.37  | 7.50 | 6000 | C/F           |
| 4"     | 11.21 | 9.94 | 4.00 | 20.00 | 15.31 | 5.77 | 10.94 | 9.94 | 6000 | C/F           |

\* WITH STANDARD SEATS AND CARBON STEEL BODY